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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,942	12/10/2003	Kiyoshi Terauchi	018842.1285	6287
24735	7590	03/09/2005	EXAMINER	
BAKER BOTTS LLP C/O INTELLECTUAL PROPERTY DEPARTMENT THE WARNER, SUITE 1300 1299 PENNSYLVANIA AVE, NW WASHINGTON, DC 20004-2400			LESLIE, MICHAEL S	
			ART UNIT	PAPER NUMBER
			3745	

DATE MAILED: 03/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/730,942	<b>Applicant(s)</b> TERAUCHI ET AL.	
	<b>Examiner</b> Michael Leslie	<b>Art Unit</b> 3745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/10/03</u> . | 6) <input type="checkbox"/> Other: ____.  |

**DETAILED ACTION*****Drawings***

Figures 6 and 7 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1 and 3-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Fujii et al.

Fujii et al. disclose a swash-plate compressor for compressing a fluid, the compressor comprising a cylinder block (13) having a cylinder bore, a piston (26) having a first end portion reciprocally movable in the cylinder bore and a second end portion opposite to the first end portion, the second end portion having a pair of engaging portions faced to each other with a space left therebetween and a side wall portion connecting the engaging portions to each other, a swash plate (22) having a part inserted between the engaging portions and driven to rotate, and a pair of sliding members (23, 24) interposed between the engaging portions and the swash plate,

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respectively, each of the sliding members having a flat portion slidably contacted with the swash plate and a spherical portion opposite to the flat portion, each of the engaging portions having a contact surface (26a) slidably contacted with the spherical portion, each of the contact surfaces extending to the side wall portion. Wherein the contact surfaces are connected to each other through the side wall portion, the contact surfaces are continuously formed between the engaging portions through the side wall portion, the contact surface is formed along a spherical surface having a curvature equal to that of the spherical portion, and wherein a carbon dioxide refrigerant is used as the fluid.

Claims 1 and 2 are rejected under 35 U.S.C. 102(a) as being anticipated by Fukai et al.

Fukai et al disclose a swash-plate compressor for compressing a fluid, the compressor comprising a cylinder block (1) having a cylinder bore, a piston (3) having a first end portion reciprocally movable in the cylinder bore and a second end portion opposite to the first end portion, the second end portion having a pair of engaging portions faced to each other with a space left therebetween and a side wall portion connecting the engaging portions to each other, a swash plate (5) having a part inserted between the engaging portions and driven to rotate, and a pair of sliding members (6) interposed between the engaging portions and the swash plate, respectively, each of the sliding members having a flat portion slidably contacted with the swash plate and a spherical portion opposite to the flat portion, each of the engaging portions having a contact surface slidably contacted with the spherical portion, each of the contact surfaces extending to the side wall portion. Wherein the contact surfaces are connected to each other through the side wall portion, and wherein the contact surface is formed along a spherical surface having a curvature equal to that of the spherical portion.

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***Prior Art***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patents 6457399, 5478212, and 5380166 disclose swash-plate compressors with pistons having contact surfaces extending to the side wall portion.


***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Leslie whose telephone number is (571) 272-4819. The examiner can normally be reached on M-F 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look can be reached on (571) 272-4820. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ML  
March 3, 2005

  
Michael Leslie  
Patent Examiner  
AU 3745

  
EDWARD K. LOOK  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700  
3/4/05